

O. Turner

1645

#9/72  
11/16/99

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RAW SEQUENCE LISTING  
PATENT APPLICATION US/09/142,613ADATE: 09/21/1999  
TIME: 11:16:58

Input Set: I142613A.RAW

This Raw Listing contains the General Information  
Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: ISHIGURO, Koichi  
2 SATO, Kazuki  
3 PARK, Jun-Mi  
4 UCHIDA, Tsuneko  
5 IMAHORI, Kazutomo  
6 <120> TITLE OF INVENTION: ANTI-PHOSPHORYLATED TAU PROTEIN ANTIBODIES AND METHODS  
7 FOR DETECTING ALZHEIMER'S DISEASE WITH THE USE OF THE  
8 SAME  
9 <130> FILE REFERENCE: 98-0997\*/LC(WMC)/1416  
10 <140> CURRENT APPLICATION NUMBER: US/09/142,613A  
11 <141> CURRENT FILING DATE: 1999-04-19  
12 <160> NUMBER OF SEQ ID NOS: 22  
13 <170> SOFTWARE: PatentIn Ver. 2.0  
14 <210> SEQ ID NO 1  
15 <211> LENGTH: 441  
16 <212> TYPE: PRT  
17 <213> ORGANISM: Homo sapiens  
18 <400> SEQUENCE: 1  
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20 1 5 10 15  
21 Gln Asp Thr Tyr Gly Leu Gly Asp Arg Lys Asp Gln Gly Gly Tyr Thr  
22 20 25 30  
23 Met His Gln Glu Gly Asp Thr Asp Ala Gly Leu Lys Glu Ser Pro Leu  
24 35 40 45  
25 Gln Thr Pro Thr Glu Asp Gly Ser Glu Glu Pro Gly Ser Glu Thr Ser  
26 50 55 60  
27 Asp Ala Lys Ser Thr Pro Thr Ala Glu Asp Val Thr Ala Pro Leu Val  
28 65 70 75 80  
29 Asp Glu Gly Ala Pro Gly Lys Gln Ala Ala Ala Gln Pro His Thr Glu  
30 85 90 95  
31 Ile Pro Glu Gly Thr Thr Ala Glu Glu Ala Gly Ile Gly Asp Thr Pro  
32 100 105 110  
33 Ser Leu Glu Asp Glu Ala Ala Gly His Val Thr Gln Ala Arg Met Val  
34 115 120 125  
35 Ser Lys Ser Lys Asp Gly Thr Gly Ser Asp Asp Lys Lys Ala Lys Gly  
36 130 135 140  
37 Ala Asp Gly Lys Thr Lys Ile Ala Thr Pro Arg Gly Ala Ala Pro Pro  
38 145 150 155 160  
39 Gly Gln Lys Gly Gln Ala Asn Ala Thr Arg Ile Pro Ala Lys Thr Pro  
40 165 170 175  
41 Pro Ala Pro Lys Thr Pro Pro Ser Ser Gly Glu Pro Pro Lys Ser Gly  
42 180 185 190  
43 Asp Arg Ser Gly Tyr Ser Ser Pro Gly Ser Pro Gly Thr Pro Gly Ser  
44 195 200 205

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45      Arg Ser Arg Thr Pro Ser Leu Pro Thr Pro Pro Thr Arg Glu Pro Lys
46          210                      215                      220
47      Lys Val Ala Val Val Arg Thr Pro Pro Lys Ser Pro Ser Ser Ala Lys
48          225                      230                      235                      240
49      Ser Arg Leu Gln Thr Ala Pro Val Pro Met Pro Asp Leu Lys Asn Val
50                      245                      250                      255
51      Lys Ser Lys Ile Gly Ser Thr Glu Asn Leu Lys His Gln Pro Gly Gly
52                      260                      265                      270
53      Gly Lys Val Gln Ile Ile Asn Lys Lys Leu Asp Leu Ser Asn Val Gln
54          275                      280                      285
55      Ser Lys Cys Gly Ser Lys Asp Asn Ile Lys His Val Pro Gly Gly Gly
56          290                      295                      300
57      Ser Val Gln Ile Val Tyr Lys Pro Val Asp Leu Ser Lys Val Thr Ser
58          305                      310                      315                      320
59      Lys Cys Gly Ser Leu Gly Asn Ile His His Lys Pro Gly Gly Gly Gln
60                      325                      330                      335
61      Val Glu Val Lys Ser Glu Lys Leu Asp Phe Lys Asp Arg Val Gln Ser
62          340                      345                      350
63      Lys Ile Gly Ser Leu Asp Asn Ile Thr His Val Pro Gly Gly Gly Asn
64          355                      360                      365
65      Lys Lys Ile Glu Thr His Lys Leu Thr Phe Arg Glu Asn Ala Lys Ala
66          370                      375                      380
67      Lys Thr Asp His Gly Ala Glu Ile Val Tyr Lys Ser Pro Val Val Ser
68          385                      390                      395                      400
69      Gly Asp Thr Ser Pro Arg His Leu Ser Asn Val Ser Ser Thr Gly Ser
70                      405                      410                      415
71      Ile Asp Met Val Asp Ser Pro Gln Leu Ala Thr Leu Ala Asp Glu Val
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73      Ser Ala Ser Leu Ala Lys Gln Gly Leu
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80 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial
81     peptide of Tau protein
82 <220> FEATURE:
83 <221> NAME/KEY: PHOSPHORYLATION
84 <222> LOCATION: (6)
85 <223> OTHER INFORMATION: Xaa=phosphoserine
86 <400> SEQUENCE: 2
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88          1                      5                      10
89 <210> SEQ ID NO 3
90 <211> LENGTH: 13
91 <212> TYPE: PRT
92 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial

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RAW SEQUENCE LISTING  
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96 <220> FEATURE:  
97 <221> NAME/KEY: PHOSPHORYLATION  
98 <222> LOCATION: (6)  
99 <223> OTHER INFORMATION: Xaa=phosphoserine  
100 <400> SEQUENCE: 3  
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102 1 5 10  
103 <210> SEQ ID NO 4  
104 <211> LENGTH: 12  
105 <212> TYPE: PRT  
106 <213> ORGANISM: Artificial Sequence  
107 <220> FEATURE:  
108 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial  
109 peptide of Tau protein  
110 <220> FEATURE:  
111 <221> NAME/KEY: PHOSPHORYLATION  
112 <222> LOCATION: (7)  
113 <223> OTHER INFORMATION: Xaa=phosphothreonine  
114 <400> SEQUENCE: 4  
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116 1 5 10  
117 <210> SEQ ID NO 5  
118 <211> LENGTH: 13  
119 <212> TYPE: PRT  
120 <213> ORGANISM: Artificial Sequence  
121 <220> FEATURE:  
122 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial  
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124 <220> FEATURE:  
125 <221> NAME/KEY: PHOSPHORYLATION  
126 <222> LOCATION: (3)  
127 <223> OTHER INFORMATION: Xaa=phosphoserine  
128 <220> FEATURE:  
129 <221> NAME/KEY: PHOSPHORYLATION  
130 <222> LOCATION: (6)  
131 <223> OTHER INFORMATION: Xaa=phosphoserine  
132 <400> SEQUENCE: 5  
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134 1 5 10  
135 <210> SEQ ID NO 6  
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139 <220> FEATURE:  
140 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial  
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142 <220> FEATURE:  
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144 <222> LOCATION: (7)

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149 <210> SEQ ID NO 7  
150 <211> LENGTH: 12  
151 <212> TYPE: PRT  
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153 <220> FEATURE:  
154 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial  
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157 <221> NAME/KEY: PHOSPHORYLATION  
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167 <220> FEATURE:  
168 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial  
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187 <223> OTHER INFORMATION: Xaa=phosphothreonine  
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191 <223> OTHER INFORMATION: Xaa=phosphoserine  
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193 Cys Arg Xaa Pro Pro Lys Xaa Pro Ser Ser Ala Lys  
194 1 5 10

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Input Set: I142613A.RAW

195 <210> SEQ ID NO 10  
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197 <212> TYPE: PRT  
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200 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial  
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202 <220> FEATURE:  
203 <221> NAME/KEY: PHOSPHORYLATION  
204 <222> LOCATION: (7)  
205 <223> OTHER INFORMATION: Xaa=phosphoserine  
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207 Cys Lys Ser Lys Ile Gly Xaa Thr Glu Asn Leu Lys  
208 1 5 10  
209 <210> SEQ ID NO 11  
210 <211> LENGTH: 12  
211 <212> TYPE: PRT  
212 <213> ORGANISM: Artificial Sequence  
213 <220> FEATURE:  
214 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial  
215 peptide of Tau protein  
216 <220> FEATURE:  
217 <221> NAME/KEY: PHOSPHORYLATION  
218 <222> LOCATION: (7)  
219 <223> OTHER INFORMATION: Xaa=phosphoserine  
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222 1 5 10  
223 <210> SEQ ID NO 12  
224 <211> LENGTH: 12  
225 <212> TYPE: PRT  
226 <213> ORGANISM: Artificial Sequence  
227 <220> FEATURE:  
228 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial  
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230 <220> FEATURE:  
231 <221> NAME/KEY: PHOSPHORYLATION  
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233 <223> OTHER INFORMATION: Xaa=phosphoserine  
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235 Cys Val Ser Gly Asp Thr Xaa Pro Arg His Leu Ser  
236 1 5 10  
237 <210> SEQ ID NO 13  
238 <211> LENGTH: 12  
239 <212> TYPE: PRT  
240 <213> ORGANISM: Artificial Sequence  
241 <220> FEATURE:  
242 <223> OTHER INFORMATION: Description of Artificial Sequence: Partial  
243 peptide of Tau protein  
244 <220> FEATURE:

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY  
PATENT APPLICATION US/09/142,613ADATE: 09/21/1999  
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Line	Error/Warning	Original Text
87	W "N" or "Xaa" used: Feature required	Lys Ser Gly Tyr Ser Xaa Pro Gly Ser Pro G
101	W "N" or "Xaa" used: Feature required	Lys Ser Ser Pro Gly Xaa Pro Gly Thr Pro G
115	W "N" or "Xaa" used: Feature required	Cys Pro Gly Ser Pro Gly Xaa Pro Gly Ser A
133	W "N" or "Xaa" used: Feature required	Lys Ser Xaa Pro Gly Xaa Pro Gly Thr Pro G
147	W "N" or "Xaa" used: Feature required	Cys Val Ala Val Val Arg Xaa Pro Pro Lys S
161	W "N" or "Xaa" used: Feature required	Cys Arg Thr Pro Pro Lys Xaa Pro Ser Ser A
175	W "N" or "Xaa" used: Feature required	Cys Arg Thr Pro Pro Lys Xaa Pro Ser Ala S
193	W "N" or "Xaa" used: Feature required	Cys Arg Xaa Pro Pro Lys Xaa Pro Ser Ser A
207	W "N" or "Xaa" used: Feature required	Cys Lys Ser Lys Ile Gly Xaa Thr Glu Asn L
221	W "N" or "Xaa" used: Feature required	Cys Glu Ile Val Tyr Lys Xaa Pro Val Val S
235	W "N" or "Xaa" used: Feature required	Cys Val Ser Gly Asp Thr Xaa Pro Arg His L
249	W "N" or "Xaa" used: Feature required	Lys Leu Ser Asn Val Ser Xaa Thr Gly Ser I
263	W "N" or "Xaa" used: Feature required	Cys Ile Asp Met Val Asp Xaa Pro Gln Leu A
277	W "N" or "Xaa" used: Feature required	Lys Leu Ser Asn Val Xaa Ser Thr Gly Ser I
295	W "N" or "Xaa" used: Feature required	Lys Leu Ser Asn Val Xaa Xaa Thr Gly Ser I